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Michael Lundeen

South Dakota State University

Larry Janssen

South Dakota State University

Bruce Johnson

South Dakota State University

Scott Peterson

South Dakota State University

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SOME ISSUES OF SECURITY
AND STABILITY ASSOCIATED
WITH FARMLAND LEASING

by

Michael Lundeen, Larry Janssen
Bruce Johnson and Scott Peterson

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Abstract

Several issues of security and stability in farmland leasing arrangements were examined in South Dakota and Nebraska surveys conducted during 1986. These issues are important because farmland leasing is increasingly an integral component of production agriculture and represents one means of decreasing financial risk.

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SOME ISSUES OF SECURITY AND STABILITY ASSOCIATED WITH FARMLAND LEASING*

by

Michael Lundeen, Larry Janssen, Bruce Johnson, and Scott Peterson**

Agricultural leasing is an integral structural component of U.S. production agriculture. About four of every ten acres of farmland is rented in a given year. The recent financial stress in agriculture has placed greater emphasis on farmland leasing. Many producers have found they can lower financial risk by controlling resources through rental rather than mortgaged ownership (Wallstreet Journal, February 3, 1987). Thus, in the future, increasing amounts of farmer-held debt capital may be replaced with rental capital, particularly nonfarmer-owned real estate capital (Penson and Duncan, 1981).

If farmland leasing represents or will represent an increasingly important component of production agriculture, do existing rental institutions provide the security and stability as well as flexibility needed to facilitate and encourage increased leasing? Some recent empirical studies indicate considerable continuity in leasing arrangements and institutions. For example, most farmland leases have remained one-year in length (Reiss, 1984) and the cropshare lease remains the most common type of farmland lease in many areas (Kirpes and Rogers, 1981). On the other hand, there have been changes in the characteristics of tenants and their attitudes toward and reasons for leasing (Albrecht and Thomas, -----

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**Lundeen is a Research Technologist at the University of Nebraska-Lincoln, Janssen is an Associate Professor at South Dakota State University, Johnson is an Associate Professor at the University of Nebraska-Lincoln, and Peterson is a Research Assistant at South Dakota State University.

1986). Moreover, the traditional agricultural "tenure ladder" has been replaced by a combination of ownership and rental of farmland (Hottel and Harrington, 1979; Gilbert and Harris, 1984).

A two-state study was conducted in Nebraska and South Dakota during 1986 to determine the characteristics and stability of the farmland rental markets in those states. In contrast to most rental studies, both farm operators renting land and non-operator landlords were surveyed using a list of farm operators and landlords provided by the Agricultural Stabilization and Conservation Service (ASCS). Approximately 6 percent of the farm operators and non-operator landlords listed were randomly sampled. The usable response rate was nearly 30 percent. In total, 1,615 Nebraska respondents and 1,155 South Dakota respondents provided information about their leases as well as their perceptions of the leasing market.

This paper focuses on the reported characteristics of farmland rental market participants and lease arrangements that affect the change and stability of those arrangements. These characteristics include: (1) participants in the rental market; (2) type and incidence of leases; (3) formality, duration, and stability of lease agreements; (4) reported competition among renters to acquire/renew leases; and (5) reported renter and landlord satisfaction with their leases.

Participants in the Farmland Rental Market

The nature and structure of the farmland rental market are influenced by the participants in that market. About half of the landlords in the South Dakota and Nebraska rental market surveys resided outside of the county in which their rental land was located (Table 1). Most farm operator respondents resided locally and were less than 65

years of age (Table 2). Additional analysis showed virtually all respondent farm operators were male, but that women represented over 40 percent of the non-operator landlord respondents. More than half of the landlords were 65 years of age or older. Their age and absentee residence suggest that many landlords may not be fully active in the management of their leased land and that maintaining existing leasing arrangements as is may be the objective of many landlords.

Previous studies have noted an increasing number of partowner-operators in the farmland leasing market (Albrecht and Thomas, 1986; Apland, Barnes, and Justus, 1984; Hottel and Harrington, 1979). The distribution of respondents to the South Dakota and Nebraska surveys supported these earlier studies (Table 2). Partowner-operators dominated those respondents who were not in the landlord only category. There were significantly more South Dakota respondents in the partowner-operator class than Nebraska respondents. This was largely because there were proportionately more part-owner operators in the South Dakota sample than in the Nebraska sample, that is, county ASCS offices identified a higher percentage of part-owners in South Dakota than in Nebraska. A related characteristic of the rental markets in the two states was an age continuum in which full tenants were generally the youngest participants and non-operator landlords the oldest, with part-owner operators and operator landlords falling in the middle.

These results suggest that many landlords enter the farmland rental market as they are retiring or are reaching retirement age and that stability in leasing arrangements may be a principal goal. The number of women and out-of-state landlords indicates much rented land has been inherited, again implying there is considerable continuity and stability

in leasing market participants and, therefore, leasing arrangements. These data suggest little about the motives of those who lease land from others, except to substantiate previous studies indicating dominance of the tenant-side of the rental market by partowner-operators.

Types and Incidence of Leasing Arrangements

There were three principal types of leases reported in these two surveys --- cropshare leases, cash leases for cropland or hayland, and pasture leases. Consistent with previous leasing studies, both South Dakota and Nebraska respondents reported a larger proportion of cropshare leases than cash leases or pasture leases --- cash leases of pasture or rangeland (Hurlburt, 1954; Kirpes and Rogers, 1981). In terms of acres rented by lease type, a disproportionate share of leased land in each state was rented under pasture leases compared to their proportion of total lease numbers (Table 3), primarily because the average ranch in both states is larger than the average farm.

Chi-square tests showed that cropshare leases represented a significantly larger portion of all reported leases in Nebraska than in South Dakota. Such leases allow the sharing by the tenant and landlord of the various risks associated with agricultural production (Reiss, 1984; Sutinen, 1975; Newbery and Stiglitz, 1979). Cropshare leases also typically require a greater role by the landlord in production decisions than cash leases (Eswaran and Kotwal, 1985). Apparently, there were two principal reasons for the higher proportion of cash leases in South Dakota: (1) a larger percentage of South Dakota landlords lived out-of-state than Nebraska landlords, suggesting South Dakota landlords may not be able to be as involved in production decisions as Nebraska landlords; and (2) a higher proportion of South Dakota rangeland was rented from

state, federal, and tribal governments than in Nebraska. Governmental entities cash lease virtually all of their rental land.

Traditionally, land ownership has been preferred to farmland leasing (Timmons, 1953). In part, this was because a tenant always faced the risk of losing a lease and usually had only one lease. But, in today's agriculture, that is less of a problem because full tenants are a smaller proportion of the leasing market than in the past and because average farm size exceeds the size of the average rental tract.

Farm operators in these surveys reported an average of 3.1 leases in South Dakota and 3.2 leases in Nebraska, compared to 2.1 leases and 2.0 leases in each state, respectively, for landlords (Table 4). In both states, over 70 percent of farm operators reported multiple leases compared to half of the landlords. As a consequence, then, many farm operators via multiple leases apparently reduce the uncertainty and instability associated with controlling their total land base with a single lease. This suggests that some of the changes in the leasing markets and production agriculture in recent decades have reduced one aspect of the tenant's risk associated with farmland leasing.

Formality, Duration, and Stability of Leases

The typical cash, cropshare, or pasture lease reported in both South Dakota and Nebraska studies had been in existence for about 10 years (Table 5). In both states, cash leases for cropland were more likely to be written than oral, whereas cropshare leases or cash leases for pasture were largely oral agreements. Despite the average length of most leases, 60 percent or more of those responding in all three lease categories reported their typical lease was an annual lease. (Legally, the length of a lease is partially a function of whether it is oral or

written. Any oral lease is legally valid only one year at a time.)

The typical cash, cropshare, or pasture lease was stable in ways other than average duration. Few respondents reported changes during the last five years in their landlord or tenant, although it was almost twice as likely for the tenant on a rental tract to change than the ownership of that tract to change during that time. Other analysis showed there had been little change in input or output shares or in the inputs shared. However, over twice as many respondents reported that a cropshare lease had changed from cropshare to cash than reported a cash lease had changed to cropshare. Cash leases usually provide a landlord with a more predictable return than cropshare leases. So, although lease arrangements are generally stable, marginal change is characteristic of leasing markets.

Tenants were also asked for their perceptions of the certainty of retaining their most important lease for the next five years. Over 80 percent of the renters responding to the South Dakota and Nebraska surveys were "reasonably" or "very" certain of retaining that lease (Table 6). Additional analysis showed those leasing from their parents or in-laws or another relative were slightly more certain of retaining their most important lease than those leasing from others. The differences were not significant, however, suggesting most tenants were confident of retaining their leases regardless of kinship.

There were, however, some measureable differences between responses in the two states --- Nebraska respondents were slightly more likely than South Dakota respondents to be "very" certain of continuing their leases. This may reflect the higher proportion of cash leases and, possibly, higher proportion of leases with governmental entities in South Dakota compared to Nebraska. In the current economic environment

with cash flow concerns and with lenders urging many tenants to negotiate cropshare leases, tenants with cash leases may be less certain of continuing their leases than tenants with cropshare leases. As noted, cash leases and leases with government were proportionately more common in South Dakota than Nebraska.

Competition in the Farmland Leasing Market

As noted above, few farm operators reported living outside the county of their leased land, which suggests that the farmland rental market is largely a local market. Additional analysis showed that most tenants (about 77 percent) learned of the availability of their leased land directly from the landowner or relatives. That was true of those leasing from parents, in-laws, or other relatives. It was also true of those leasing from unrelated individuals, financial institutions, and the state and federal governments. However, those leasing from non-relatives or from governmental entities were more likely to learn of the availability of their rental land from the media or other sources than other tenants.

The local nature of the farmland rental market apparently does not preclude the perception by participants of competition in that market, at least, when a tenant first leases a tract. About half of the tenant respondents reported having competition for their leased land at the time they first secured their leases (Table 7). More tenants reported competition at the start of leases when they rented from an unrelated individual, a financial institution, or the government compared to renting from a parent, in-law, or other relative. Although few reported competition at the time of renewal of their leases, competition at renewal was more likely if there had been competition at the start of a

lease (Table 8). Thus, the rental markets appear to be largely local and somewhat informal and familial, but competitive at the margin especially when the potential tenant and landlord were unrelated.

Perceptions of Leases

Given the apparent stability in leasing arrangements and the farmland leasing market reported above, it was not surprising that most South Dakota and Nebraska respondents had a generally favorable perception of their leases; that is, landlords and tenants would have presumably made and reported changes in their leases if they were dissatisfied. Over 60 percent of the farm operator respondents reported their leases were "good" or "excellent" (Table 9). Additional analysis showed those renting from parents, in-laws, or other relatives were more satisfied with the fairness of their leases than those leasing from unrelated individuals or others.

Landlords likewise reported overall satisfaction with their leases' fairness. Although additional analysis showed that 70 percent of the landlords reported it was easy to secure acceptable tenants, landlord satisfaction with their leases depended on the perceived ease of securing acceptable tenants. Those who found it easy to secure acceptable tenants were more likely to report their leases were "good" or "excellent" than other landlords. Still, 30 to 40 percent of those who found it difficult to find acceptable tenants reported their leases were "fair" or "adequate." Nebraska landlord respondents were more likely than South Dakota landlords to report their leases were "excellent."

Conclusions and Implications

The farmland rental markets in South Dakota and Nebraska appear stable, but generally responsive to the different relationships and characteristics of participants and to changes in agricultural production and economic conditions. And, despite the differences between the states in the percentage of absentee landlords and distribution of cash and cropshare leases, most landlords and tenants in both states reported satisfaction with their leasing arrangements and confidence that those leases would continue. In this analysis, farmland leasing appeared to be an effective means of acquiring or disbursing production control for farm operators and of maintaining ownership control for landlords. The sources of this stability seemed to be the comparatively long-term duration of both land ownership and tenancy patterns, the local nature of leasing markets, the tenant-landlord relationship, and the gradual nature of change in production agriculture. Despite the predominance of short-term, oral leases, tenant-landlord relationships in a local market solidify over time so that both parties achieve a sense of security and stability.

Although stability was characteristic of the rental market, that did not infer rigidity. Rental institutions have evolved. Marginal or incremental change was also characteristic of those markets, resulting from changes in production agriculture and market participants. Based on evidence reported here and elsewhere, it appears that farmland rental markets do adapt and will continue to adapt to changes in land ownership patterns and production agriculture.

Table 1. Operator status of respondents to South Dakota and Nebraska Farmland Rental Surveys, 1986, by location of residence in relation to leased land.

Residence	South Dakota			Nebraska		
	Farm Operator	Landlord Only	Sample Total	Farm Operator	Landlord Only	Sample Total
Same County	89.9%	45.6%	65.0%	85.2%	48.9%	61.8%
Other County	6.2	21.9	15.0	13.6	27.9	22.9
Out-of-State	3.9	32.5	20.0	1.2	23.1	15.4
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
N =	506*	649	1,155	573	1,042	1,615
Chi-square =	248.3			227.2		
p ≤	0.001			0.001		

*Correlation between number of farm operators and landlords in South Dakota and Nebraska: Chi-square = 19.3; p < 0.005.

Sources: 1986 South Dakota and Nebraska Farmland Rental Surveys.

Table 2. Distribution of tenant, part-owner, full-owner, and landlord respondents to the South Dakota and Nebraska Farmland Rental Surveys, 1986, by state, age, and tenure status.

State/ Age	Tenant	Partowner Operator	Partowner Operator Landlord	Fullowner Operator Landlord	Non- Operator Landlord	Sample Totals
SOUTH DAKOTA						
Age of Respondent						
<45 years	78.9%	46.0%	15.3%	22.3%	10.4%	25.8%
45-64 years	19.8	47.3	64.4	44.4	35.2	39.2
65 or more	2.3	6.8	20.3	33.3	54.4	35.0
Totals	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Tenure status*	7.7%	26.0%	5.4%	4.7%	56.2%	100.0%
NEBRASKA						
Age of Respondent						
<45 years	75.6%	41.6%	27.7%	15.6%	10.1%	23.3%
45-64 years	17.8	53.4	50.8	51.6	36.0	38.2
65 or more	6.6	5.0	21.5	32.8	53.9	38.4
Totals	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Tenure status	10.8%	16.5%	4.1%	4.0%	64.5%	100.0%

*Correlation between distribution of operator status between respondents to South Dakota and Nebraska surveys: Chi-square = 46.2; p < 0.005.

Sources: South Dakota and Nebraska Farmland Rental Surveys, 1986.

Table 3. Distribution of total reported leases and average reported acres in South Dakota and Nebraska Farmland Leasing Surveys, 1986.*

Type of Lease	Average Per Respondent	Number of Leases		Acres	
		Number	% Total	Average	% Total
SOUTH DAKOTA					
Cash**	1.8	1,033*	35.3	354	26.2
Cropshare	1.6	1,175	40.2	414	39.1
Pasture	1.7	717	24.5	647	33.7
		-----	-----		-----
Totals		2,925	100.0		100.0
NEBRASKA					
Cash	2.0	836	21.8	386	19.8
Cropshare	1.8	2,276	59.4	362	50.3
Pasture	1.5	721	18.8	580	29.9
		-----	-----		-----
Totals		3,833	100.0		100.0

*

Correlation between number of reported leases in each category between South Dakota and Nebraska surveys: Chi-square = 256.3; $p < 0.001$.

**Cash leases are cash leases for cropland or hayland.

Sources: 1986 South Dakota and Nebraska Farmland Leasing Surveys.

Table 4. Landlord, farm operator, and total responses to South Dakota and Nebraska Farmland Leasing Surveys, 1986, by average number of leases and distribution of leases.

	South Dakota			Nebraska		
	Farm Operator	Landlord Only	Total	Farm Operator	Landlord Only	Total
Average number of leases	3.1	2.1	2.5	3.2	2.0*	2.4
Number of leases per respondent						
1	27.2%	53.3%	42.2%	28.6%	60.3%	49.0%
2	23.1	30.3	27.1	25.5	25.5	25.5
3-5	37.8	13.9	24.3	33.9	11.9	19.7
6 plus	11.4	2.5	6.4	12.0	2.3	5.8
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

*

T-value for equality of means between landlords and farm operators: South Dakota = 3.98; $p < 0.001$; Nebraska = 4.80; $p < 0.0001$.

Sources: 1986 South Dakota and Nebraska Farmland Rental Surveys.

Table 5. Formality and stability of cropshare, cash, and pasture leases reported in South Dakota and Nebraska Farmland Leasing Surveys 1986, by state and characteristics.

State/ Characteristic	Type of Lease		
	Share	Cash	Pasture
SOUTH DAKOTA			
Average length in years*	13.1	10.3	11.3
The lease is:	Percent of Respondents Per Lease Type		
1. oral	70.5	51.4	61.9
written	29.5	48.6	38.1
2. annual	68.0	63.9	66.9
multi-year	32.0	36.1	33.1
During the past five years, (or the time you have leased this tract, if shorter), has:	Percent of Respondents Per Lease Type Indicating There Had Been Noted Change		
1. land ownership changed?	4.0	6.5	5.8
2. there been a different tenant?	12.5	14.0	5.6
3. the leased changed from cash to share rent?	6.2		
4. the lease changed from share to cash rent?		12.9	
NEBRASKA			
Average length in years	13.6	10.2	12.0
The lease is:	Percent of Respondents Per Lease Type		
1. oral	64.1	37.2	60.7
written	35.9	62.8	39.3
2. annual	66.2	69.1	76.7
multi-year	33.8	30.9	23.3
During the past five years, (or the time you have leased this tract, if shorter), has:	Percent of Respondents Per Lease Type Indicating There Had Been Noted Change		
1. land ownership changed?	6.0	6.5	6.1
2. there been a different tenant?	13.8	19.0	18.4
3. the leased changed from cash to share rent?	4.2		
4. the lease changed from share to cash rent?		17.9	

*T-tests showed significant differences between means reported by landlords and tenants. The tenant values for South Dakota were 10 years for cropshare, 9 for cash, and 10 for pasture. The tenant values for Nebraska were 12 years for cropshare leases, 9 years for cash leases, and 10 years for pasture leases.

Sources: 1986 South Dakota and Nebraska Farmland Leasing Surveys.

Table 6. Tenant responses to "How would you evaluate the opportunity for continuing to lease your most important tract for the next five years?," South Dakota and Nebraska Farmland Leasing Surveys, 1986, by state.

	Very Uncertain	Uncertain	Reasonably Certain	Very Certain
	- - - - -	Percent of Total	- - - - -	
South Dakota* N = 426	6.5	11.3	53.6	28.6
Nebraska N = 491	7.5	9.8	46.8	35.8

*

Correlation between state and responses to question about certainty of continuing lease: Chi-square = 6.5; $p \leq 0.10$.

Sources: 1986 South Dakota and Nebraska Farmland Leasing Surveys.

Table 7. Percent of respondents reporting the existence of competition at the start and at the renewal of their leases, South Dakota and Nebraska Farmland Leasing Surveys, 1986, by type of lessor.

Type of Lessor	South Dakota		Nebraska	
	Start	Renewal	Start	Renewal
Parent* N =	15.6% 32	0.0% 33	24.5% 49	8.0% 50
Relative N =	30.6% 49	20.4% 49	35.5% 62	14.5% 62
Unrelated individual N =	50.8% 262	22.4% 255	59.7% 285	20.6% 287
Government N =	57.8% 45	22.3% 48	72.7% 33	51.5% 33

*

Correlation between lessor and reported competition at start of lease: South Dakota --- Chi-square = 21.5; $p \leq 0.005$; Nebraska --- Chi-square = 33.8; $p \leq 0.001$. Correlation between lessor and reported competition at renewal of lease: South Dakota --- Chi-square = 18.4; $p \leq 0.005$; Nebraska --- Chi-square = 29.0; $p \leq 0.001$.

Sources: 1986 South Dakota and Nebraska Farmland Leasing Surveys.

Table 8. Reported existence of competition for respondent leasees' leases at renewal of lease, South Dakota and Nebraska Farmland Leasing Surveys, 1986, by reported competition at start of lease.

Competition at start?	Competition at renewal?			
	South Dakota		Nebraska	
	Yes	No	Yes	No
Percent of Those Responding				
Yes*	34.5	65.5	35.9	64.0
No	10.9	89.1	4.9	95.3
N =	435		486	

*

Correlation between "competition at start" and "competition at renewal:" South Dakota --- Corrected Chi-square = 36.0; $p \leq 0.001$;
Nebraska --- Corrected Chi-square = 68.6; $p \leq 0.001$.

Source: 1986 South Dakota and Nebraska Farmland Leasing Surveys.

Table 9. Responses to "From the standpoint of fairness, how would you classify your leasing arrangements?" by respondents to South Dakota and Nebraska Farmland Leasing Surveys, 1986, by state and operator status.

		Responses				
State/ Operator Status	Number	Poor	Fair	Adequate	Good	Excellent
		Percent of Total				
SOUTH DAKOTA*						
Farm operator	480	2.7	10.4	23.1	37.5	26.3
Landlord only	616	0.8	11.8	20.0	43.0	24.4
All respondents	1,096	1.6	11.2	21.4	40.6	25.2
NEBRASKA						
Farm operator	548	1.6	8.6	21.9	40.9	27.0
Landlord only	1,006	1.2	9.0	19.0	40.4	30.5
All respondents	1,554	1.4	8.8	20.0	40.5	29.3

*

Correlation between states and responses to questions:

Farm operators --- Chi-square = 3.3; $p = \text{n.s.}$

Landlords --- Chi-square = 9.5; $p < 0.05$.

All respondents --- Chi-square = 8.5; $p \leq 0.10$.

Sources: 1986 South Dakota and Nebraska Farmland Leasing Surveys.

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